#### INTERNATIONAL SEARCH REPORT

international application No 1\$2005/014219

# A. CLASSIFICATION OF SUBJECT MATTER H04N5/232

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ & \text{HO4N} & \text{GO2B} & \text{GO6T} \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where pradical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

| Category* | Citation of document, with indication, where appropriate, of the relevant passages         | Relevant to claim No. |
|-----------|--|-----------------------|
| x         | US 5 915 047 A (MURAMOTO ET AL)<br>22 June 1999 (1999-06-22)<br>the whole document         | 1,8                   |
| X         | US 4 930 861 A (OKABE ET AL)<br>5 June 1990 (1990-06-05)<br>columns 1,2,12                 | 1,8                   |
| A         | EP 0 732 846 A (YAMADA, YOSHIRO)<br>18 September 1996 (1996-09-18)<br>pages 2,3,4          | 1,8                   |
| <b>A</b>  | US 2004/036792 A1 (MORIYA CHIKATSU ET AL) 26 February 2004 (2004-02-26) the whole document | 1,8                   |
|           | <b>-/-</b> -   | ,                     |
|           |  |                       |

| Further documents are listed in the continuation of Box C.  | X See patent family annex.   |
|---|--|
| 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filling date but later than the priority date claimed | <ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul> |
| Date of the actual completion of the international search   | Date of mailing of the international search report   |
| 29 March 2006   | 06/04/2006   |
| Name and mailing address of the ISA/  European Palent Office, P.B. 5818 Palentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016   | Authorized officer  Ellerbrock, T  |

## INTERNATIONAL SEARCH REPORT

JS2005/014219

| C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |  |     |  |  |  |  |  |  |  |
|--|--|-----|--|--|--|--|--|--|--|
| Category'  | Citation of document, with indication, where appropriate, of the relevant passages                     | 1,8 |  |  |  |  |  |  |  |
| A  | JP 63 102589 A (FUJI PHOTO FILM CO LTD) 7 May 1988 (1988-05-07) the whole document                     |     |  |  |  |  |  |  |  |
| X  | JP 04 339489 A (MATSUSHITA ELECTRIC IND CO<br>LTD) 26 November 1992 (1992-11-26)<br>the whole document |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
| · .  |  |     |  |  |  |  |  |  |  |
| *  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  | * ' |  |  |  |  |  |  |  |
|  |  | ·   |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |
|  | ×  |     |  |  |  |  |  |  |  |
|  |  |     |  |  |  |  |  |  |  |

national application No. PCT/US2005/014219

## INTERNATIONAL SEARCH REPORT

| Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)  |
|---|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:  |
| Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:   |
|   |
| 2. X Claims Nos.: 2-7 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| see FURTHER INFORMATION sheet PCT/ISA/210   |
| Claims Nos.:     because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).  |
| Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  |
| Box III Observations where unity of invention is boxing (commediate) or the comme   |
| This International Searching Authority found multiple inventions in this international application, as follows:   |
|   |
|   |
| As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.  |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.   |
|   |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:                             |
|   |
|   |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the Invention first mentioned in the claims; it is covered by claims Nos.:                 |
|   |
|   |
| Remark on Protest  The additional search fees were accompanied by the applicant's protest.  |
| No protest accompanied the payment of additional search fees.   |

Form PCT/ISA/210 (continuation of first sheet (2)) (January 2004)

#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 2-7

The dependent claims 2-7 are unclear to such an extent that it cannot be established whether the prior art falls within the scope of the claims. It can neither be recognized at the time being how this severe lack of clarity can be overcome without infringing Art. 19(2) and 34(2)(b), PCT. It is therefore concluded that no meaningful search is possible. As a consequence the they are not searched. The reason is the dependent claims inherit severe unclarity features from claim 1 and moreover that they partly add even more unclear expressions.

The claim 1 is a severe accumulation of severe unclarities. Especially the features related to lines 10-21 of claim 1 are unclear (according to Art. 6, PCT) to such an extent that it cannot be determined whether they are disclosed by the prior art or not. It can neither be recognized at the time being how this severe lack of clarity can be overcome without infringing Art. 19(2) and 34(2)(b), PCT. A meaningful search can therefore neither be conducted for these features nor for depending claims which are based on claim 1. As a consequence, the related features are not searched (refer to Art. 17(2)(a)(11) and (b), PCT).

The search was therefore limited to the following interpretation of claim 1 or 8, respectively.

An image capture focal length determining method, comprising the steps

acquiring a plurality of image data while changing focal length of an optical system;

acquiring, from the acquired plurality of image data,

high frequency component [...] values,

and low frequency component [...] values,

[...]

being [...] lower than the high frequency calculating a first focal length using [...] a peak value of the frequency spectrum of the image signal in range of the high frequency component values.

detecting whether or not there is a moire in image data of this first focal length;

making the first focal length an image capture focal length if there is no moire in the image data of the first focal length; and when there is moire in the image data of the first focal length,

selecting an image capture focal length in some range of possible focal length.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

## INTERNATIONAL SEARCH REPORT

formation on patent family members

Ir "inal application No I \_\_\_ JS2005/014219

| Patent document dited in search report |    | Publication<br>date |  | Patent family<br>member(s)  | Publication date   |
|--|----|---------------------|--|---|--|
| US 5915047                             | Α  | 22-06-1999          | NONE   |   |  |
| US 4930861                             | Α  | 05-06-1990          | NONE   |   | ·.   |
| EP 0732846                             | A  | 18-09-1996          | DE<br>DE<br>ES<br>WO<br>JP<br>JP<br>KR<br>US | 69429014 D1<br>69429014 T2<br>2167412 T3<br>9515055 A1<br>3312974 B2<br>7147649 A<br>240133 B1<br>5995137 A | 13-12-2001<br>11-07-2002<br>16-05-2002<br>01-06-1995<br>12-08-2002<br>06-06-1995<br>15-01-2000<br>30-11-1999 |
| US 2004036792                          | A1 | 26-02-2004          | DE<br>FR                                     | 10338248 A1<br>2843810 A1   | 04-03-2004<br>27-02-2004   |
| JP 63102589                            | A  | 07-05-1988          | NONE   |   |  |
| JP 4339489                             | Α  | 26-11-1992          | JΡ   | 2811996 B2  | 15-10-1998   |